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RESEARCH

Estresse em pacientes submetidos a tratamento antineoplásico

Stress in patients submitted to drug therapy

Estrés en los pacientes sometidos a tratamiento quimioterápico

Andrea Bezerra Rodrigues [1], Patrícia Peres de Oliveira [2], Lúcia Pinel Talignani Ferreira [3], Claudia Sales Manzan [4], Ione Araújo [5], Magali Kimie Buno Hiratsuka [6]

ABSTRACT

Objective: evaluating the level of stress in oncology patients receiving anticancer treatment; which stressors are referring to this situation and examining the relationship of the same with sociodemographic variables and oncologic disease. **Method:** a descriptive, exploratory study, quantitative, performed in an onco-hematology ward of a private hospital of large size, located in São Paulo. There was used a form containing sociodemographic information and instrument for the assessment of stress (Inventory Lipp Stress Symptoms). **Results:** most of the female participants (56,0%), aged 41-50 years old (34,0%) had gastrointestinal cancer (31,0%), 78,0% of patients had stress, and nausea and alopecia side effects most cited, both with 16,0%, making it the biggest stressors under treatment. **Conclusion:** a significant proportion of patients suffered from stress. Thus, it is essential to monitor the nursing for cancer patients so they can better cope with the disease and treatment. **Descriptors:** Stress psychological, Neoplasms, Nursing, Drug therapy.

RESUMO

Objetivo: avaliar o nível de estresse de pacientes que estavam recebendo tratamento antineoplásico, quais os estressores referentes a essa situação e examinar a relação do mesmo com variáveis sociodemográficas e doença oncológica. **Método:** estudo descritivo-exploratório, quantitativo, realizado em um ambulatório de onco-hematologia de um hospital privado, de grande porte, localizado no município de São Paulo. Utilizou-se um formulário que continha informação sociodemográfica e instrumento para a avaliação do estresse (Inventário de Sintomas de Estresse de Lipp). **Resultados:** predomínio do sexo feminino (56,0%), idade entre 41 a 50 anos (34,0%), com câncer gastrointestinal (31,0%), 78,0% dos pacientes apresentaram estresse, sendo a náusea e a alopecia os efeitos colaterais mais citados pelos entrevistados, ambos com 16,0%, tornando-se os maiores estressores no tratamento. **Conclusão:** uma proporção importante de pacientes sofria de estresse. Destarte, torna-se essencial o acompanhamento da enfermagem aos pacientes oncológicos para que possam melhor enfrentar a doença e o tratamento. **Descritores:** Estresse psicológico, Neoplasias, Enfermagem, Quimioterapia.

RESUMEN

Objetivo: evaluar el nivel de estrés en pacientes que reciben tratamiento contra el cáncer, qué factores de estrés están relacionados con estas situaciones y examinar la relación de la misma con las variables sociodemográficas. **Método:** un estudio descriptivo-exploratorio, cuantitativo, realizado en la clínica de consulta externa de onco-hematología de un hospital privado amplio, ubicado en São Paulo. Se utilizó un formulario que contiene información sociodemográfica y de instrumentos para la evaluación del estrés (Lipp Inventario de Síntomas de Estrés). **Resultados:** hubo predomínio femenino (56,0%), con edades entre 41 a 50 años (34,0%), tenían cáncer gastrointestinal (31,0%), 78,0% de los pacientes tenían estrés. Náuseas y alopecia los efectos secundarios más citados, ambas con un 16,0%, y el más altos factores de estrés en el tratamiento. **Conclusión:** una proporción significativa de los pacientes sufría de estrés. Monitoreo esencial de enfermería para pacientes con cáncer por lo que mejor puede hacer frente a la enfermedad y al tratamiento. **Descriptores:** Estrés psicológico, Neoplasias, Enfermería, Quimioterapia.

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INTRODUCTION

According to the World Health Organization (WHO), cancer is the leading cause of death worldwide.[1,2] In 2012, the world, the disease caused 8.2 million deaths, there were 32,6 million people living with cancer (within 5 years after diagnosis).[1] The trend of this rate is increasing, reaching about 21,4 million new cases in 2030, when 13,2 million evolve to death as a result of aging and population growth, as well as the reduction in infant mortality and deaths infectious diseases in developing countries such as Brazil.[2,3] According to figures released by the National Cancer Institute (INCA), the estimated number of new cases of cancer, or cancer, for the year 2014, which will be valid for the year 2015, points to the occurrence of approximately 576.000 new cases of cancer.[3]

Cancer is a disease that brings many changes for the person who goes through this experience, both physical and psychological, causing inconvenience to the lives of these patients. Current treatments seek a better quality of life. In almost all cases, the cancer chemotherapy is employed. According to its purpose, cancer chemotherapy can be classified into: healing, which aims to eradicate evidence of cancer cells; palliative, aimed at minimizing symptoms caused by tumor proliferation increasing survival. It can also be classified according to treatment period in which it is held, and may be secondary, that is, performed after a primary treatment such as surgery and; neoadjuvant when it is performed before the main treatment[4-5]

The treatment alters the patient's life, the prospects and possibilities of choice and everyday life is interrupted, the person is removed from society that is accustomed and inhabits the world of the hospital, the drugs and their effects, treatment and its invasive procedures, absence from work, friends, family, and thus can expose the patient to a level of stress.[6-7]

The term stress was introduced in the health field in 1936 by Hans Selye.[6] This writer stress as a nonspecific organic response to stressful situations within the individual body.[7] In 2001, other researchers,[8] defined stress as a suitability reaction/ adjustment of the organism from situations that require a large emotional stress to be dislodged, or stress situations.

In stress there are described three stages: alarm, resistance and exhaustion. The phase of alert is evaluated as the positive phase of stress, ie, the person is energized by the release of adrenaline, the survival instinct is preserved and a sense of fullness is

commonly achieved. In the second phase, called the resistance, the individual automatically tries to deal with stressors in order to sustain his internal homeostasis. If the stressors continue in frequency or amplitude, there is a disruption in the individual's resistance and he goes to the exhaustion phase. At this stage of the disease can occur in the most vulnerable body systems such as peptic ulcers, psoriasis, and myocardial depression.[6,8]

Although stress has been classified into three phases, a scholar in the area identified and showed both statistically and clinically analysis through research, a new phase of the stress process, including the near-exhaustion steps, because it is located between the resistance phase and exhaustion, and is characterized by a reduction in the individual who is unable to fight the stressor or adapt.[9]

The diseases are beginning; however are not as severe as in the burnout stage. Despite showing wear, the individual can still exercise labor activities and live in society to some extent, different from what happens in the burnout stage, when the person to organize and live properly, unable, in most cases, focus on exercise or work activities.[9]

The stress associated with genetic predisposition factors contributes to originate vulnerability for a long period of time before the anxiety disorders and depression.[6] This situation becomes even more special when the affected are women. Many studies show that women experience more stress than men.[6,8] Research has evaluated anxiety, depression and somatic complaints such as mismatch signal to stressful episodes as especially anxiety and depression are symptoms of stress. People with cancer diagnosis experience several that affect them at different stages of disease,[4] including the anticancer treatment.[4,10] Thus, treatment and monitoring, not only of cancer but also the stress caused, is essential.

In general, the routine of anticancer treatment, getting used to the procedures often painful, leave the house routine for the hospital, among others. These situations lead to a series of consequences such as the disintegration of the psychosocial system, intensification of death anxiety, leading to mobilization of psychological defenses and the redirection of energy to adapt to hospital reality and its procedures.[4,11]

The demands of a cancer treatment involving hospitalization, excessive tests, complex anticancer regimens, complicated names of medications, side effects, among others, may bring the patient to feelings such as fear, anxiety, and pain importance. Thus, stress reactions can be identified as a result of these changes influenced by how the patient will react to treatment.[12]

Based on these assumptions, the question is: What level of stress of the patients in anticancer treatment? There is a relationship of the same with sociodemographic and oncologic disease? And, what are the stressors related to this situation?

Therefore, it is understood that assess stress in cancer patients receiving antineoplastic is important to identify those at higher risk of developing psychopathological disorders during treatment, contributing to the organization of nursing care to these patients. In this sense, the objective of this study was to assessing

the level of stress in patients receiving anticancer treatment, which stressors related to such situation and examining the relationship of the same with sociodemographic variables and oncological diseases.

METHOD

This study deals with a part of a research entitled "stress level in patients undergoing chemotherapy". This is a descriptive, exploratory study of a quantitative approach, performed in an onco-hematology ward of a private, large located in São Paulo. Based on convenience sampling, was adopted as a criterion for selection, cancer patients admitted to the clinic and they made use of antineoplastic, and have performed at least one full cycle of chemotherapy protocol evaluated in December 2010 to June 2011, totaling 32 participants in the study.

Inclusion criteria were people over the age of 21 who were undergoing antineoplastic chemotherapy and conscious, being checked the level of consciousness by applying the Glasgow Scale, with a score of 15. Exclusion criteria were individuals who possessed personal history of psychiatric illness and were drug users.

Two instruments for data collection were used. One is a questionnaire that was developed by the research of authors consisting variables: gender, age, malignancy, how long ago discovered the disease, how long is undergoing anticancer treatment and a matter for the participant quoting the three main stressors for him for the anticancer treatment.

According to the instrument was the Inventory of Stress Symptoms for Adults Lipp (ISSL). This instrument has been validated in Brazil in 1994 and to assess whether the person has stress, in which phase it is and the stress manifests itself through symptoms in physical or psychological area.[13]

The ISSL identifies the stages of stress: alarm, resistance and exhaustion respectively. In total, the ISSL displays 34 items of somatic and psychological 19, with symptoms often repeated, differing only in their intensity and severity. The individual is evaluated according to physical or psychological symptoms that you have experienced in the last 24 hours, last week and last month. The new weighted phase by Lipp during the evaluation of this instrument, the near-exhaustion phase, is identified on the basis of the frequency of items checked in the endurance phase. The analysis of the instrument was carried out by a psychologist in partnership with the researchers as recommended by the author of the ISSL.[13]

Thus, currently, the ISS consists of a list of physical and psychological symptoms that identify if the individual has stress, at what stage of the process is (alarm, resistance, near-exhaustion and depletion) and if his symptoms are more characteristic the physical dimension or psychological. It is structured in three tables dealing with the four phases of stress: Table 1 evaluates the alert phase (Q1); table 2, the phase resistance and the phase near exhaustion (Q2); Table 3, the depletion stage (Q3) which allows diagnosis of stress. The respondent is asked to indicate whether the stress has shown symptom specified in each frame in 24 hours (Q1), one week (Q2) or a month (Q3). The evaluation is perpetrated in terms of percentage test tables. The view of stress can be examined if any of the raw scores reach certain limits (greater than 6 in Q1, more than 3 in Q2, more than 8 in Q3).[13]

The work followed the ethical principles of research involving humans, serving Resolution 466/2012 of the National Health Council. The project was approved by the Research Ethics Committee (COEP), Hospital Israelita Albert Einstein, São Paulo, Brazil, as CAAE: 0119.0.028.000-08 and protocol 08/893. Prior to the gathering, a formal request authorization for the collection of data to the responsible for the onco-hematology clinic was held. The researchers explained the objectives of the work and the form of participation for those who agreed to participate. Survey participants accepted voluntarily the invitation to participate in the study by signing a Consent Agreement and Informed (IC) and met the instruments after completing orientation thereof (questionnaire to characterize the sample and Inventory of Stress Symptoms for adult Lipp). These were applied by the researchers in their own box of the patient.

For making database, it was used Epidata software, version 3.1b, and for data analysis, SPSS (Statistical Package for Social Sciences), version 18.0. It was performed a descriptive analysis through frequency tables and graphs. To analyze the relationship between the variables and the stress applied to the chi-square test. A significant p-value ($p<0,05$) indicates that there is some relationship between these variables. After study completion patients received a letter of response containing the results. In cases of stress observed in phases of exhaustion and near exhaustion, there was referral to psychological services of the institution.

RESULTS AND DISCUSSION

There were studied 32 persons in antineoplastic treatment, and it was found that most of the population was composed of 16 females (56,0%), aged 41 to 50 years old, 11 (34,0%) subjects, average age of 46,5 years old, who had gastrointestinal cancer 10 (30%) patients with cancer, eight people with respiratory tract (25,0%), hematologic malignancy nine (19,0%) respondents, five (16,0%) patients with breast cancer and three (9,0%) of the respondents treated for cancer in the genitourinary tract. Without an occupation 21 (66,0%) patients, among these most have not ceased to exercise their occupational activity due to the chemotherapy. In relation to the discovery of time the disease 21 (66,0%) of respondents had a diagnosis of cancer less than a year, and 25 (78,0%) of the subjects were treating the cancer less than a year **(Table 1).**

Table 1. Distribution of patients undergoing chemotherapy by gender, age, illness, occupational activity, discovery time of illness and disease treatment time. São Paulo-SP, Brazil, 2011.

Variable	N=32	%
Sex		
Female	18	56,0
Male	14	44,0
Age (years)		
21 – 30	2	6,5
31 – 40	6	19,0
41 – 50	11	34,0
51 – 60	5	16,0
61 – 70	3	9,0
71 – 80	2	6,5
over 80	3	9,0
Oncology treatment		
Gastrointestinal tract cancer	10	31,0
Respiratory tract cancer	8	25,0
Hematologic cancer	6	19,0
Breast câncer	5	16,0
Genito-Urinary tract cancer	3	9,0
Occupational activity		
No	21	66,0
Yes	11	34,0

Time of discovering of the disease (years)		
Less than 1	21	66,0
01 – 06	9	28,0
07 – 12	1	3,0
13 – 18	1	3,0
Time of treatment of the disease (years)		
Less than 1	25	78,0
01 – 06	5	16,0
07 – 12	1	3,0
13 – 18	1	3,0

With regard to these stressors perceived by patients, we expect the results of treatment was reported by 15 (46,0%) respondents, but in most cases, 17 (54,0%) of subjects reported as major stressors effects the anticancer treatment **(Table 2)**, nausea and alopecia indicated, both for five (16,0%) surveyed, fatigue mentioned three (9,0%) people food and the difficulty of changing the taste narrated by two (6,5%) of these patients each.

Table 2. Stressors reported by patients compared to chemotherapy. São Paulo-SP, Brazil, 2011.

Variable	N=32	%
Expectation on the results of treatment	15	46,0
Effects of the anticancer treatment	17	54,0

Chemotherapy leads to physical side effects such as nausea, vomiting, constipation, alopecia, and fatigue. As the diagnosis of cancer has a significant social impact, the increase in the side effects of chemotherapy may cause the patient to feel powerless to react and fight disease tell.[11]

Nausea was one of the side effects most frequently reported by patients (16,0%), it is a very common effect in chemotherapy, often responsible for the anxiety and stress of it, because, in most cases, is accompanied by symptoms such as pallor, weakness, dizziness and sweating thus causing a general malaise, making it more difficult to face the patient's treatment.[4] Research conducted in the United States pointed out that the nausea and vomiting induced by antineoplastic is a striking factor for the loss of physical functions, such as going to work, perform household chores, practicing leisure activities, prepare meals, have self-care and even the ability to take medications.[14]

In large randomized clinical trial, approximately 50.0% of patients treated with high emetic risk chemotherapy were vomiting, and 58% experienced nausea, despite undergoing antiemetic therapy.[15]

Alopecia has also a stress treatment to 16% of patients, and is considered by those facing anticancer treatment of the most devastating effects because it directly affects the self-image causing embarrassment since, in general, causes considerable impact on the quality lives of patients; it is a sign that the person is being treated for an illness like cancer.[11]

Currently, the scalp cooling is a well-known method for reducing chemotherapy-induced alopecia in patients with cancer resulting from solid tumors. German study with patients undergoing treatment for breast cancer, noted that the side effects related to the skin of cooling were mild, well tolerated and provided a high level of satisfaction of the research participants.[16] In this study none of the interviewed patients underwent scalp cooling therapy.

Another stressor was the expectation of the results of treatment, mentioned by 15 (46,0%) respondents as to the patient chemotherapy is long, complex and involves not only him but also his family. The treatment itself can be understood as a threat, since it can ward off the individual from society, by frequent hospitalizations, often leading to the abandonment of relatives and friends. Patients may adopt a fatalistic attitude or become suggestible for curing. It is a disease that can lead to negative feelings, hampering the development of the fighting to facilitate and to collaborate in a more realistic and positive way with the patient.[5,7,17]

In this study, to realize the chi-square test did not observe an association between stress and the variables: age, sex, disease, occupational activity, discovery of disease duration, disease treatment time and state of anxiety, ie, value $p > 0.05$, not significant.

It can be seen that in this study, most patients filled anticancer treatment of stress criteria. It is known that the cancer or the mere possibility of having a malignant tumor leads one to despair, fear, distress, hopelessness, sadness, nervousness.[4,6] A survey conducted in order to evaluate the level of stress in women with mastectomies, in assessing stress in 84 patients, found that 69,0% of them were with stress.[18] Similar to our study.

Stress is a set of specific answers and/or widespread human body on the internal and/or external, concrete or imaginary situations, perceived as destabilizing homeostasis and require the entry into action of adaptive mechanisms with the capacity to reorganize and re-balance integrity of the organism.[7,9]

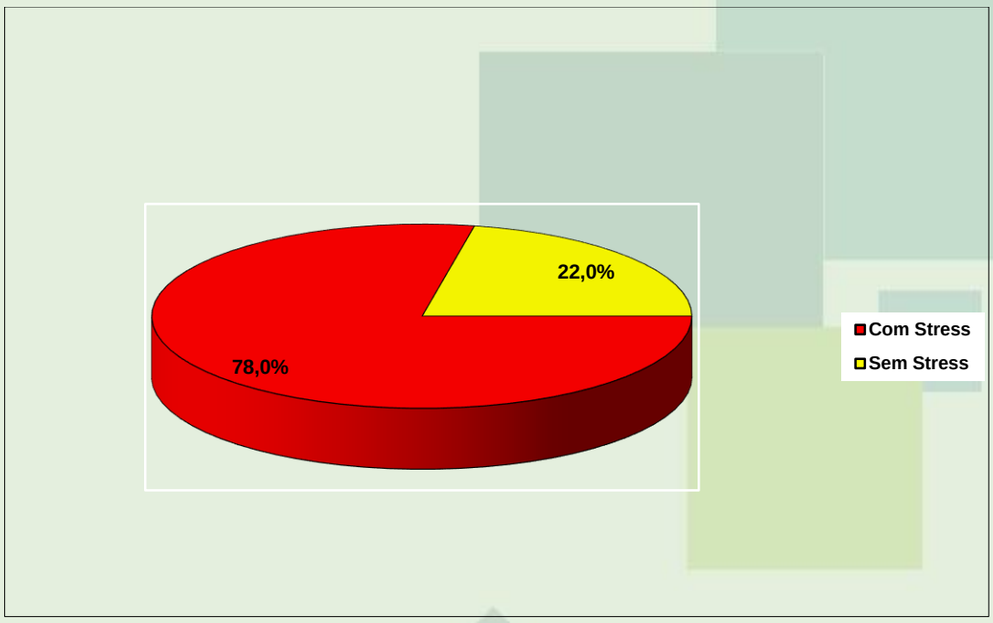

Figure 1. Distribution of patients with neoplastic treatment according to the stress presentation. São Paulo-SP, Brazil, 2011.

Of the 78,0% subjects with stress, lying on the resistance layer 24 (75,0%) persons, one (3,0%) patient in the phase of depletion and almost none in alert and exhaust phases. The nature of the symptoms predominated physical symptoms in 23 (72,0%) respondents in anticancer treatment **(Figure 2).**

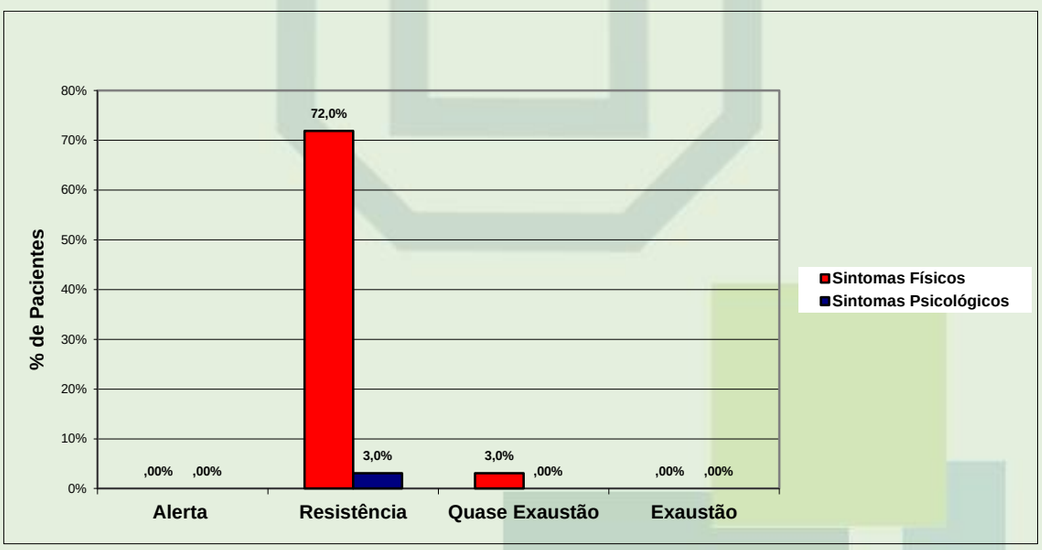

Figure 2. Distribution of patients with stress, in relation to the predominance of physical and psychological symptoms in relation to the stress phase. São Paulo-SP, Brazil, 2011.

The alert phase is the positive phase of stress. When the stressor has a certain length, the adrenaline is eliminated and there is the restoration of homeostasis and the person leaves this stage without complications for his welfare. At this stage happens an increase in productivity and the person handling the stress it can use it to his advantage, because of the motivation, enthusiasm and energy that he produces.[9] None of the patients in this study was in the stress alert phase.

If the stressor is not eliminated, the body moves to the second stage, the resistance, the person using any adaptive energy to re-equilibrate. However, if this reservation is sufficient, one can balance stress itself and there exits the process. If the stressor requires more effort to adapt in addition to the individual capacity of the body weakens becoming more vulnerable to disease. The person in the state of stress can move the alert to the resistance in a matter of seconds. There are two symptoms that appear quite frequently so at this stage: the general feeling of wear without apparent cause and difficulties with memory.[8,9,13,17-20] In this study 75,0% of patients were at this stage.

Stress reactions are the implications of adaptation efforts. So if the reaction to the aggressive stimulus is strong and intense, may occur as consequences of various diseases or increased predisposition to develop them. However they may be defined as physical or psychological differing from person to person.[8-9]

Among the psychological symptoms, stress resistance phase, the "emotional sensitivity" was reported by all patients. Some studies indicate that the woman has a higher level of psychological stress and greater emotional sensitivity than men, especially aspects linked to their family and marital roles,[8-9] different this study where both women and men reported that sensitivity.

The physical symptoms most often reported by patients who are in resistance phases were near exhaustion and the constant feeling of physical exhaustion, and then nausea. The feeling of physical exhaustion can be difficult to control, as well as nausea, depending on the chemotherapy protocol.

Currently, there are few reliable studies to guide the choice of appropriate antiemetic therapy, even with the significant advances of antiemetic drugs.[4,17] There are factors that need to be estimated by the presence of nausea and vomiting induced by antineoplastic as being female and having history of frequent nausea and vomiting, such as during pregnancy. The risk of vomiting after chemotherapy session increases of 20,0% in people who do not have factors mentioned above for up to 76,0% for those with factors described.[4,16,20]

The nature of the symptoms, the majority of patients with stress had a greater amount of physical symptoms, followed by psychological symptoms. The prevailing stress resistance of the layer was followed by phase near exhaustion. In the resistance phase predominated physical symptoms, being at this stage indicates that they are trying to cope with stressors to which they are subjected to seek homeostasis. Therefore, to their health this denotes a vulnerability to infection and disease, as the search active homeostasis the hypothalamic-pituitary-adrenal axis and the sympathetic nervous system which leads to the release of glucocorticoids from the adrenal cortex and epinephrine and norepinephrine from adrenal medulla and sympathetic neurons, and too energy consumption.[18]

In a study about stress and social skills in patients with laryngeal cancer, it was found that among the participants, most showed stress at some stage, with predominant phase of resistance followed the exhaustion phase. No participant was in alert phase or

near exhaustion. The nature of the symptoms, psychological symptoms predominated. Psychological symptoms of stress frequently found: doubt about the own self; constantly think of one subject and exhaustion.[19]

Currently the word stress have long been used by people as a way of styling their everyday problems and just not being seen as a process and often not perceived and treated properly. Coping with stress is a major challenge especially when it comes to a disease like cancer, it is a dreaded disease for people and their treatment is usually associated with pain and death.

When it is carrying out this study was faced with feelings of patients, many positive times as courage, fighting, disease coping as well as negative feelings, such as sadness, helplessness and apathy, most often considered by the patient as a symptom of their own disease and not imagining that those symptoms could be the stress process is new or already installed, and if diagnosed and treated appropriately for their physical and mental health would be suitable to face the anticancer treatment.

Invest in the care offered to cancer, patients are to invest in improving their quality of life. Nurses should set goals and objectives that will contribute to the reduction of stress factors, such as offering a means of relaxation during the course of cancer chemotherapy.

In a theoretical reflection on the importance of non-pharmacological interventions aimed at nursing procedures for patients with cancer, it was discussed and emphasized the music therapy as an important resource in the nursing field.[11] Thus, it becomes imperative to include programs permanent health education service with training in the use of complementary therapies in order to increase the interest of professional teams who work in this area,[11,21] especially in oncology sectors.

Research aimed to verify the use of acupuncture on symptoms of stress; it was found that after the acupuncture intervention, there was a reduction in symptoms of stress and intensity of the complaint (main symptom of ISSL) of the participants. People who, before treatment, were phases of alarm, resistance and exhaustion almost, after treatment, for the most part, no longer had stress, or regressed to the early stages of alert and resistance.[22]

Therefore, the nurse along with other health professionals such as psychologists, can be facilitators of stress diagnosis process and the use of complementary therapies in health services, participating not only as project executors, but also the evaluation of its effectiveness in stress reduction. Thus enable the alleviation of the suffering of patients, especially cancer in anticancer treatment. But for that, the professionals had to seek expertise to know how to act, evaluate and guide patients and other members of the healthcare team about the benefits of using complementary therapy.[11]

It is noteworthy that this study presented as limiting the reduced sample size, due to having been held in a single outpatient clinic with patients undergoing cancer chemotherapy, despite being in accordance with the criteria of the method. However, this limitation serves as a guide for more detailed future studies to ratify the positive

results and encourage the continuation of this type of evaluation with larger groups of patients and in different hospital spaces for a possible confirmation of these preliminary results.

CONCLUSION

This study concluded that most anticancer treatment in patients met criteria stress. By linking stress with the variables there was no significant relationship.

It was found that the cancer and its treatment can be a stressful event generator, being essential in assisting the person with cancer, the application of the instrument used in this study in order to evaluate the stress more often, enabling the detection of patients who need counseling.

Thus, it points up the importance of interdisciplinary and holistic care offered to cancer patients in order to minimize the impacts of stressors caused by cancer and anticancer treatment and collaborate on problems facing mode to better handle the emotional stress to which they are subject.

These findings may have important clinical implications for these cancer patients. Initially, it highlights the need for periodic evaluation of stressors and their effects on health and quality of life of patients, with consequent development strategies that offer these individuals interventions that provide an improvement in their quality of life. In addition to the effectiveness of a multidisciplinary team of health professionals can actively participate in the process to identify and minimize stressors, thus favoring the treatment of these patients.

It is recommended that this research about stress cancer patients on anticancer treatment with larger sample sizes need to be made so that the results can be generalized, in addition, also conducting research focusing on the relationship between stress and previous episodes of life could be contributing to the genesis of cancer.

REFERENCES

1. World Health Organization. Cancer WHO Definition of Palliative Care [Internet]. 2012; WHO [updated 2011 Aug 10; cited 2011 Aug 10]. Available from: http://www.who.int/cancer/palliative/definition/en/

2. World Health Organization. National cancer control programmes: policies and managerial guidelines [Internet]. 2012; [cited 2014 Aug 11]. Available from: http://www.who.int/cancer.

3. Brasil, Ministério da Saúde. Estimativa 2014: incidência de câncer no Brasil. Rio de Janeiro (RJ): Instituto Nacional de Câncer; 2014.

4. Sá CU de, Rodrigues AB, Oliveira PP de, Andrade de CT, Amaral JG. Quality of life and people using antineoplastic agents: a descriptive study. Online Braz J Nurs. [serial on the Internet]. 2014 [cited 2014 Dec 30] 13(4):579-90. Available from: http://www.objnursing.uff.br/index.php/nursing/article/view/4979/pdf_330.

5. Mistura C, Schenkel FW, Rosa BVC, Girardon-Perlini NMO. The experience of accompanying a family member hospitalized for cancer. J res: fundam care online [serial on the Internet]. 2014. [cited 2014 Dec 30] 6(1):47-61. Available from: http://www.seer.unirio.br/index.php/cuidadofundamental/article/view/2867/pdf_1045

6. Primo CC, Amorim MHC, Castro DS, Paraguassú TC, Nogueira TP, Bertolani GBM, Leite FMC. Stress in mastectomized women. Invest Educ Enferm. 2013;31(3): 385-394.

7. Alves PC, Santos MCL, Fernandes AFC. Stress and Coping Strategies for Women Diagnosed with Breast Cancer: a Transversal Study. Online Braz J Nurs. [serial on the Internet]. 2012 [cited 2013 Dec 12] 11(2). Available from: http://www.objnursing.uff.br/index.php/nursing/article/view/3714/pdf.

8. Lipp MEN, Malagris LEN. O stress emocional e seu tratamento. In: Rangé B. Pisicoterapias cognitivo-comportamentais: um diálogo com a Psiquiatria. 2 ed. Porto Alegre: Artmed; 2001. P. 475-90.

9. Lipp MEN. Mecanismos neuropsicofisiológicos do stress: teorias e aplicações clínicas. 3. ed. São Paulo: Casa do psicólogo; 2010.

10. Peck-Radosavljevic M. Drug therapy for advanced-stage liver cancer. Liver Cancer. 2014;3(2):125-31.

11. Silva GJ, Fonseca MS, Rodrigues AB, Oliveira PP, Brasil DRM, Moreira MMC. Utilização de experiências musicais como terapia para sintomas de náusea e vômito em quimioterapia. Rev Bras Enferm. 2014 Jul-Ago;67(4):630-6.

12. Bonassa EMA, Gato MIR. Terapêutica oncológica para enfermeiros e farmacêuticos. 4. ed. São Paulo (SP): Atheneu; 2011.

13. Lipp MEN. Manual do Inventário de Stress para adultos de LIPP. 2. ed. São Paulo: Casa do Psicólogo; 2005.

14. Pirri C, Bayliss E, Trotter J, Olver IN, Katris P, Drummond P, et al. Nausea still the poor relation in antiemetic therapy? The impact on cancer patients' quality of life and psychological adjustment

of nausea, vomiting and appetite loss, individually and concurrently as part of a symptom cluster. Support Care Cancer. 2013; 21(3):735-48.

15. Waar DG. Chemotherapy and cancer related nausea and vomiting. Curr Oncol [Internet]. 2008 [cited 2012 dec 12];15(1):1-9. Available from: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2216421/

16. Friedrichs K1, Carstensen MH1. Successful reduction of alopecia induced by anthracycline and taxane containing adjuvant chemotherapy in breast cancer - clinical evaluation of sensor-controlled scalp cooling. Springerplus. 2014 Sep;3:500.

17. Gozzo TO, Moyses AMB, Silva PR, Almeida AM. Nausea, vomiting and quality of life in women with breast cancer receiving chemotherapy. Rev Gaúcha Enferm. 2013; 34 (3): 110-16.

18. Primo CC, Amorim MHC, Castro DS, Paraguassú TC, Nogueira TP, Bertolani GBM, Leite FMC. Stress in mastectomized women. Invest Educ Enferm. 2013;31(3): 385-394.

19. Grun, TB. Stress e habilidades sociais em pacientes com câncer de laringe [Dissertation]. Campinas: Pontifícia Universidade Católica de Campinas - Mestrado em Psicologia do Centro de Ciências da Vida; 2009.

20. Fernández-Ortega PP, Caloto MT, Chirveches EE, Marquilles RR, Francisco JS, Quesad AA. Chemotherapy – induced nausea and vomiting in clinical pratice: impacto on patients' quality of life. Support Care Cancer. 2012; 20 (12):3141-48.

21. Caminha LB, Silva MJP, Leão ER. The influence of musical rhythms on the perception of subjetive states of adult patients on dialysis. Rev Esc Enferm USP [Internet]. 2009 [cited 2014 december 12];43(4):923-9. Available from: http://www.ncbi.nlm.nih.gov/pubmed/20085165.

22. Doria MCS, Lipp MEN, Silva DF da. O uso da acupuntura na sintomatologia do stress. Psicol cienc prof. 2012; 32(1):34-51.

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